

REMARKS

The rejections of Claims 1-4 and 9 as being anticipated by WO '424 under 35 U.S.C. § 102(b), of Claims 1-7 and 9 as being anticipated by Burk also under 35 U.S.C. § 102(b), of Claims 5-7 as being unpatentable over WO '424 under 35 U.S.C. § 103(a), and of Claim 8 as being unpatentable over WO '424 in view of Burk and EP '093 also under 35 U.S.C. § 103(a) are respectfully traversed. Reconsideration is requested of the foregoing amendments and following comments.

The newly cited WO '424 and Burk documents, like the previously distinguished EP '093 document fail, either singly or in hypothetical combination, to teach or even suggest the new claimed invention, particularly with respect to the formula describing the shape of the curvature of the wave fronts and the lens surfaces as described at page 2, line 7, et seq. of the disclosure. That curvature follows a simple formula that does not include polynomial terms for the modification of the curvature of the lens surface in dependence of the aperture radii. This claimed formula is valid for all radii, beginning at the lens center towards the outer lens zone.

The WO '424 lenses proceed from the assumption that the average cornea for patients who will undergo a cataract surgery is represented by a prolate surface following the more complicated formula set forth on page 13. The resulting ophthalmic lens has a prolate surface following that formula to reduce

at least spherical aberration. Zernike polynomial coefficients are modified or balanced in dependence of the aperture radius.

The Burk aspheric intraocular lens is designed to eliminate most of the spherical aberration by using progressively longer radii toward the outer zone of the lens (see col. 4, lines 27 to 29). The formula for obtaining this curvature is described at col. 4, lines 61 to 65 and shows, like the WO '424, formula that in addition to the elliptic or hyperbolic curvature, polynomial terms with the coefficients A, B, C, D are provided to vary the curvature from the apex to the edge of the lens (col. 5, lines 1 to 15 and the chart therebelow showing the coefficients for different dioptries). Thus, the Burk patent discloses much the same teaching as that of the WO '424 document in that the polynomial coefficients have to be modified in dependence of the aperture radii. Thus, known intraocular lens attempted to avoid spherical aberration, as explained in connection with Fig. 3 of the Burk patent for parallel incoming light rays (see col. 4, lines 10-26). In order to avoid spherical aberration, this known lens transforms incoming parallel light rays (plane wave front) into a spherical wave front.

In contrast, the present invention provides an intraocular lens whose surface curvature follows a simple formula so that in an in vivo eye environment, an incoming elliptically oblongly curved wave front is refracted into an outgoing spherical wave front. The present invention considers the cornea's topographical asphericity that transforms an incoming plane wave front into a oblong elliptical

wave front in an immersion medium (aqueous humour) behind the cornea. Thereby, the refractive surface can transform in the immersion medium an incoming oblongly elliptical wave front into a spherical wave front wherein the refracting lens surface follows a simple curvature formula.

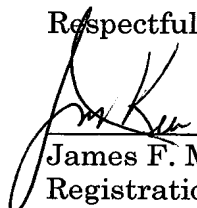
In view of the foregoing amendments, the rejections do not set forth a *prima facie* case of anticipation and/or obviousness. Accordingly, early and favorable action is earnestly solicited.

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 037333.57191US).

Respectfully submitted,

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